

3. (Amended) A method of tuning an oscillator of a receiver, comprising:  
receiving an electromagnetic signal having a frequency within a predetermined range of reception frequencies;  
comparing the frequency of the desired received signal to a threshold frequency;  
tuning the oscillator of the receiver to a frequency within the range of reception frequencies based on the threshold frequency, that is less and more than the received frequency when the received frequency is above and below the threshold frequency, respectively,  
further comprising representing the threshold frequency as an index value of a set of index values, the set of index values uniquely corresponding to a set of channels in said predetermined range of reception frequencies.

8. (Amended) A method of tuning an oscillator of a receiver, comprising:  
receiving an electromagnetic signal having a frequency within a predetermined range of reception frequencies;  
comparing the frequency of the desired received signal to a threshold frequency;  
tuning the oscillator of the receiver to a frequency within the range of reception frequencies based on the threshold frequency, that is less and more than the received frequency when the received frequency is above and below the threshold frequency, respectively,  
wherein the range of frequencies is bounded by high and low frequencies  $F_{HIGH}$  and  $F_{LOW}$ , respectively, the threshold frequency approximately equalling  $F_{LOW} + (F_{HIGH} - F_{LOW})/2$ .

9. (Amended) A method of tuning an oscillator of a receiver, comprising:  
receiving an electromagnetic signal having a frequency within a predetermined range of reception frequencies;  
comparing the frequency of the desired received signal to a threshold frequency;  
tuning the oscillator of the receiver to a frequency within the range of reception frequencies based on the threshold frequency, that is less and more than the received frequency when the received frequency is above and below the threshold frequency, respectively,  
wherein the range of frequencies is 2400 MHz to 2485 MHz inclusive.

13. (Amended) A receiver, comprising:  
a signal path for conducting a received electrical signal of reception frequency within a predetermined range of frequencies;

and a frequency controller coupled to said local oscillator and said source for providing a frequency control signal to said local oscillator that always sets the frequency of said local oscillator to a frequency that differs from that of a received signal within said predetermined frequency range by said intermediate frequency and is within said predetermined frequency range.

a local oscillator, for providing a local oscillator signal;

a mixer coupled to said local oscillator and said signal path for providing an intermediate frequency,

wherein the predetermined frequency range is 2440 MHz to 2485 Mhz inclusive.

14. (Amended) A receiver, comprising:

a signal path for conducting a received electrical signal of reception frequency within a predetermined range of frequencies;

and a frequency controller coupled to said local oscillator and said source for providing a frequency control signal to said local oscillator that always sets the frequency of said local oscillator to a frequency that differs from that of a received signal within said predetermined frequency range by said intermediate frequency and is within said predetermined frequency range.

a local oscillator, for providing a local oscillator signal;

a mixer coupled to said local oscillator and said signal path for providing an intermediate frequency,

wherein the frequency controller further comprises a microprocessor.